

Telescopes

Gather electromagnetic radiation from space in order for us to see objects better

I. Optical Telescopes

- The most common type. Allow us to study all visible light in space
- Two lenses: First lens gathers the light, the second lens magnifies the image

A. Refracting Telescopes

- First type, used by Galileo
- uses lenses
- Images cannot be completely focused
- Lenses cannot be too big; Large lenses make images blurry

B. Reflecting Telescope

- Invented by Newton
- Uses mirrors
- Mirrors can be big
- A scratched mirror will not affect the image
- Clearer focus

II. Atmosphere Problems

- Earth's atmosphere causes light from space to blur
- Light pollution from large cities makes it hard to see many space objects
- Best places for a telescope: A mountain top, a dry area and space (like the Hubble Telescope)

III. The Electromagnetic Spectrum

- All the waves of radiation in the universe are on this chart
- Each part has a different wavelength (it goes in order from longest to shortest)
- Found by using a non-optical telescope

<http://www.darvill.clara.net/emag/index.htm>

